

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE SPECIFICATION

The specification has been amended at page 23, line 11, to better accord with Fig. 5. No new matter has been added, and it is respectfully requested that the amendments to the specification be approved and entered.

THE CLAIMS

Claim 1 has been amended to clarify that the height coordinate acquisition position setting unit sets a sample area as a bounding rectangle that circumscribes the sample image area, divides the rectangular sample area at predetermined intervals in grid form to obtain a plurality of grid points, and sets grid points that include the sample as the plurality of positions in the XY plane at each of which the height coordinate Z is acquired. See, for example, Fig. 5 and the disclosure in the specification at page 19, line 3 to page 20, line 19.

In addition, claim 1 has also been amended to make a few minor grammatical and clerical improvements.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and entered.

THE PRIOR ART REJECTION

Claims 1 and 2 were rejected under 35 USC 103 as being obvious in view of the combination of USP 6,215,892 ("Douglass et al"), USP 7,027,628 ("Gagnon et al") and USP 7,542,596 ("Bacus et al"). These rejections, however, are respectfully traversed with respect to the claims as amended hereinabove.

Significantly, according to the present invention as recited in amended independent claim 1, the height coordinate acquisition position setting unit sets a sample area as a bounding rectangle that circumscribes the sample image area, divides the rectangular sample area at predetermined intervals in grid form to obtain a plurality of grid points, and sets grid points that include the sample as the plurality of positions in the XY plane at each of which the height coordinate Z is acquired.

For example, as described in the specification at page 19, line 3 to page 20, line 19, with respect to Fig. 5, a sample area 41 is set as a bounding rectangle that circumscribes the sample image area 40. As shown in Fig. 5, the rectangular sample area 41 is divided at predetermined intervals L in grid form to obtain a plurality of grid points. Of the plurality of grid points, those

that include the sample are set as the plurality of positions in the XY plane where the height coordinate Z is acquired. For example, in Fig. 5, the grid points a through g include the sample and are therefore set as the plurality of positions in the XY plane at each of which the height coordinate Z is acquired. The grid point between grid points b and g in Fig. 5, on the other hand, does not include the sample and is not set as one of the plurality of positions in the XY plane at each of which the height coordinate Z is acquired.

It is respectfully submitted that Douglass et al does not disclose or suggest the feature of the present invention as recited in amended independent claim 1 whereby the height coordinate acquisition position setting unit sets a sample area as a bounding rectangle that circumscribes the sample image area, divides the rectangular sample area at predetermined intervals in grid form to obtain a plurality of grid points, and sets grid points that include the sample as the plurality of positions in the XY plane at each of which the height coordinate Z is acquired.

Douglass et al merely discloses setting a 3x3 grid of focus points, for which focus points are determined, that is centered on the scan area. See column 11, lines 41-45. By contrast, according to the present invention as recited in amended independent claim 1, a bounding rectangle is set that

circumscribes the sample image area (which has been extracted from the wide angle view image), and the rectangular sample area is divided at predetermined intervals in grid form to obtain a plurality of grid points.

In addition, it is respectfully submitted that Douglass et al does not disclose the feature of claim 1 whereby the grid points (of the obtained grid points) that include the sample are set as the plurality of positions in the XY plane at each of which the height coordinate Z is acquired. By contrast, according to Douglass et al, if one of the 3x3 points lies outside the scan area, additional points are added that are closer to the center of the scan area. See column 11, lines 45-50 of Douglass et al.

With the height coordinate acquisition position setting unit of the present invention as recited in amended independent claim 1, height coordinate acquisition positions can be set at adequate positions in only an area in which the sample is present. Accordingly, a focal position can be correctly determined for a Z-direction correction with good accuracy for correcting for the tilt of a sample.

By contrast, with the technique of Douglass et al, since a 3x3 grid is centered on the sample and additional points are added if points of the 3x3 grid lie outside the scan area, there are varied intervals between points at which the focal position

is acquired. And the varied intervals impair the accuracy of correcting for the tilt of the sample.

On page 4 of the Office Action, the Examiner agrees that Douglass et al fails to disclose "the Z coordinate calculation and the bounding as claimed." For this reason, the Examiner has cited Bacus et al as disclosing "setting a rectangular sample area which bounds the sample image area." It is respectfully pointed out, however, that according to the present invention as recited in amended independent claim 1, the height coordinate acquisition position setting unit sets a sample area as a bounding rectangle that circumscribes the sample image area. With this structure of the present invention as recited in amended independent claim 1, it becomes possible to set the positions in which the height coordinate Z is acquired at appropriate intervals in a bounding rectangular region that circumscribes the sample image area such that the least possible excessive space occupied by other than the sample image area is created within the bounding rectangular region. As a result, the focal point positions for correction in the Z direction can be obtained securely. See Fig. 5.

It is respectfully submitted that Bacus et al does not disclose or suggest that the rectangular bounding regions (for example, the regions 314 and 316 in Fig. 3) thereof circumscribe the sample therein as according to the present invention as

recited in amended independent claim 1. See Fig. 3 and corresponding disclosure in the specification of Bacus et al.

Therefore, it is respectfully submitted that even if Douglass et al, Gagnon et al and Bacus et al were combinable in the manner suggested by the Examiner, any such combination still would not achieve or render obvious the features of the present invention as recited in amended independent claim 1 whereby the height coordinate acquisition position setting unit sets a sample area as a bounding rectangle that circumscribes the sample image area, divides the rectangular sample area at predetermined intervals in grid form to obtain a plurality of grid points, and sets grid points that include the sample as the plurality of positions in the XY plane at each of which the height coordinate Z is acquired.

In view of the foregoing, it is respectfully submitted that the present invention as recited in amended independent claim 1 and claim 2 depending therefrom clearly patentably distinguishes over Douglass et al, Gagnon et al and Bacus et al, taken singly or in combination, under 35 USC 103.

* * * * *

Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

Application Serial No. 10/723,573
Response to Office Action

Customer No. 01933

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned for prompt action.

Respectfully submitted,

/Douglas Holtz/

Douglas Holtz
Reg. No. 33,902

Frishauf, Holtz, Goodman & Chick, P.C.
220 Fifth Avenue - 16th Floor
New York, New York 10001-7708
Tel. No. (212) 319-4900
DH:jd